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10/830,150	04/23/2004	Shuichi Izawa	1081.1202	7843
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STAAS & HALSEY LLP			MARTINEZ, DAVID E	
SUITE 700			ART UNIT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/830,150

Applicant(s)

IZAWA ET AL.

Examiner

David E. Martinez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Newly submitted claim 21 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new claim as directed to controlling a financial transaction operation has limitations directed to the conversion of transaction control signals from a financial transaction apparatus.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 21 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 1, lines 10-12 render the claim indefinite since it is not clear what the term "which are a common type" is referring to. It could be referring to the parameters stored in the parameter file being a common type, it could be referring to said first transaction control signals being a common type or it could also be referring to the parameter file itself being a common type.

With regards to independent claims 9 and 17, they suffer from the same deficiencies as claim 1 above due to a similar amended limitation and thus they are rejected under the same rationale.

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With regards to dependent claims 2-8, 10-16, and 18-20, they suffer from the same deficiencies and their respective parent claims and thus are rejected under the same rationale.

With further regards to claim 17, in line 5, the term "said first transaction control signals" lacks antecedent basis.

Due to the vagueness and a lack of clear definiteness in the claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-11, 15-17 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 7,024,668 to Shiomi et al. (hereinafter Shiomi).

1. With regards to claim 1. Shiomi teaches an automatic transaction apparatus [fig 15 element 11 is a network interface that is connected to a remote transaction apparatus not shown – column 7 lines 39-44] for communicating with a host [fig 15 element 30] and performing a transaction operation according to a operation of a customer [column 14 lines 12-20], comprising:

a plurality of I/O units for performing said transaction operation [fig 15 elements 35b1, 35b2]; and

a control unit [fig 15 elements 33, 34, 35] controlling one of said I/O units [fig 15 elements 35b1, 35b2] according to first transaction control signals from said host [column 14

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lines 12-29, element 30 is the application execution apparatus that uses control signals to execute an operation for an application], and wherein said control unit comprises:

a middleware layer [fig 15 element 33] operating according to control of a kernel [fig 15 element 34a] and controlling one of said plurality of I/O units [fig 15 elements 35b1, 35b2];

a parameter file storing to convert said first transaction control signals, which are a common type to all apparatus connected to said host and specified by an interface with said host into second transaction control signals specific to said middleware layer [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36], and

an I/O control layer [fig 15 elements 33, 34] converting the said first transaction control signals, into said second transaction control signals specific to said middleware layer by referring to said parameter file, and operating said middleware layer based on said second transaction signals [column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36],

and wherein said middleware layer [fig 15 element 33] specific to said apparatus [fig 15 element 11] controls said I/O units [fig 15 elements 35b1, 35b2] so as to perform a financial transaction operation designated by said first transaction signals, according to said second transaction signals [column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

2. With regards to claim 2, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein:

said I/O control layer [fig 15 elements 33, 34] further comprises a plurality of I/O control libraries [fig 3 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside

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element 34b] corresponding to each of said plurality of I/O units [fig 15 elements 35b1, 35b2];
and

said I/O control layer calls up one of said plurality of I/O control libraries according to the first transaction control signals from said host, reads parameters corresponding to one of said plurality of I/O control libraries from said parameter file, edits said second transaction control signals specific to said middleware layer using the parameters, and operates said middleware layer [fig 15 element 33 operates inside the middleware layer, column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

3. With regards to claim 3, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said middleware layer comprises:

an I/O client layer intermediating third transaction control signals to one of said plurality of I/O units [fig 15 element 33a, column 14 lines 21-29];

an I/O server layer starting and ending an I/O operation and controlling the communication protocol by said third transaction control signals of said I/O client layer [fig 15 element 33b, column 14 lines 43 to column 15 line 21]; and

an I/O service provider layer converting messages with each of said plurality of I/O units [fig 15 element 33c, column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

4. With regards to claim 7, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said I/O control layer renders logical the reply from one of said plurality I/O unit and forwards it to said host [column 15 lines 32-46 providing a resource to the application (the application being the interface card connected to the host)].

5. With regards to claim 8, Shiomi teaches the automatic transaction apparatus according to claim 7, wherein;

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one of said plurality of I/O units is an I/O unit handling a medium [column 18 lines 28-36];
and

said I/O control layer renders logical the reply regarding said medium from said I/O unit,
and forwards it to said host [column 15 lines 32-46 providing a resource to the application (the
application being the interface card connected to the host)].

6. With regards to claims 9 and 17, they are of the same scope as claim 1 above and thus
are rejected under the same rationale.

7. With regards to claim 10, it is of the same scope as claim 2 above and thus is rejected
under the same rationale.

8. With regards to claim 11, it is of the same scope as claim 3 above and thus is rejected
under the same rationale.

9. With regards to claim 15, it is of the same scope as claim 7 above and thus is rejected
under the same rationale.

10. With regards to claim 16, it is of the same scope as claim 8 above and thus is rejected
under the same rationale.

11. With regards to claim 19, Shiomi teaches the automatic transaction apparatus according
to claim 1, wherein said I/O control layer converts said first transaction control signals
comprised of first common commands for said financial transaction into said second transaction
control signals comprised of second commands and parameters specific to said middleware
[parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside
element 34b hold parameters which are used to convert bytecode (a first transaction control
signals) to binary code (second transaction control signals) used by all apparatus connected to
said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

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12. With regards to claim 20, Shiomi teaches the automatic transaction control method according to claim 1, wherein said converting comprises converting said first transaction control signals comprised of first common commands for said financial transaction into said second transaction control signals comprised of second commands and parameters specific to said middleware [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,024,668 to Shiomi et al. (hereinafter Shiomi). in view of US Patent Application Publication No. US 2004/0131082 A1 to Evans et al. (hereinafter Evans).

13. With regards to claim 4, Shiomi is silent as to the automatic transaction apparatus according to claim 1, wherein said plurality of I/O units implement cash transactions based on said operation of the customer, however, Evans teaches using a plurality of I/O units which implement cash transactions based on an operation of a customer [paragraphs 4, 6 and figs 2 and 3] for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously [paragraph 4] and being able to access data stored in different types of I/O units when performing a transaction [paragraph 6].

It would have been obvious to combine the teachings of Shiomi and Evans to have said plurality of I/O units implement cash transactions based on said operation of the customer for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously and being able to access data stored in different types of I/O units when performing a transaction [Evans paragraph 6].

14. With regards to claim 5, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said I/O control layer receives said first transaction control signals from said host which follow transaction sequence specified by said customer, operates one of said plurality of I/O units, and returns a reply to said host [column 15 lines 32-46], but he is silent as to the transaction sequence being a cash transaction sequence. However, Evans teaches the use of a cash transaction sequence for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously and being able to access data stored in different types of I/O units when performing a transaction [paragraphs 4 and 6].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Shiomi and Evans to have the transaction sequence be a cash transaction sequence for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously and being able to access data stored in different types of I/O units when performing a transaction [Evans paragraphs 4 and 6].

15. With regards to claim 12, it is of the same scope as claim 4 above and thus is rejected under the same rationale.

16. With regards to claim 13, it is of the same scope as claim 5 above and thus is rejected under the same rationale.

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Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,024,668 to Shiomi et al. (hereinafter Shiomi). in view of Applicant's Admitted Prior Art (hereinafter AAPA).

17. With regards to claim 6, Shiomi is silent as to the automatic transaction apparatus according to claim 1, wherein said control unit further comprises a browser for communicating with said host on the Web and exchanging said first control signals specified by the interface between said I/O control layer and said host. However, AAPA teaches a control unit comprises a browser for communicating with the host on the web and exchanging control signals specified by the interface between an I/O control layer and the host for the benefit of being able to communicate with the host over the web to perform transactions from any location [fig 27, AAPA disclosed in the instant application in section "Description of Related Art"].

It would have been obvious to one of ordinary in the art at the time of the invention to combine the teachings of Shiomi and AAPA to have a browser for communicating with said host on the Web and exchanging said first control signals specified by the interface between said I/O control layer and said host for the benefit of being able to communicate with the host over the web to perform transactions from any location [fig 27, AAPA disclosed in the instant application in section "Description of Related Art"].

18. With regards to claim 14, it is of the same scope as claim 6 above and thus is rejected under the same rationale.

Response to Arguments

Applicant's arguments filed 3/2/07 have been fully considered but they are not persuasive.

With regards to Applicant's arguments directed to claims 1, 9 and 17 in pages 7-9, the Examiner respectfully disagrees.

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As per the citations to the Shiomi reference under the claim rejections above, Shiomi teaches "a parameter file storing to convert said first transaction control signals, which are a common type to all apparatus connected to said host and specified by an interface with said host into second transaction control signals specific to said middleware layer [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "automatic financial transaction apparatus" and "first common transaction control signals") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that "said middleware layer specific to said apparatus controls said I/O units **so as to perform a financial transaction** operation designated by said first transaction signals, according to said second transaction signals" (remarks pages 8 and 0), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's argument that Shiomi fails to disclose "a first transaction control signals, which is a common type to all apparatus connected to said host and specified by an interface with said host into second transaction, control signals specific to said middleware

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layer" (remarks page 8), please note the 112-2nd paragraph rejection above disclosing how the claim language argued is not clear and fails to be consistent with applicant's argument.

In response to applicant's arguments (remarks page 10) that Evans fails to disclose "wherein said plurality of I/O units implement cash transactions based on said operation of the customer" the cited paragraph 4 discloses merchandising, supply chain and order management which are known in the art to be cash transactions based on the operation of a customer.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's arguments against the references individually (AAPA – remarks page 11), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEM

DM

Brian R. Peugh
Primary Examiner
5/24/07